



CJL

**CERTIFICATE OF MAILING UNDER 37 C.F.R 1.8(a)**

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Date: 11 / 9 / 2009

By: Christine Kotran  
Christine Kotran

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventors: Heinz Berner and Gabriele Kerber

Patent No.: 7,612,103 - Issued: Nov. 3, 2009

Serial No.: 10/521,926 - Filed: July 22, 2005

Title: PLEUROMUTILIN DERIVATIVES AS ANTIMICROBIALS

Attorney File: KS4258US.RCE (#90711)

**Certificate**

ATTN: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NOV 16 2009

**of Correction**

**REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 C.F.R. 1.322**

Sir:

A printing error has occurred in the above-referenced U.S. Patent No. 7,612,103 issued November 3, 2009. Specifically, on the cover page at item (30), Foreign Application Priority Data, please delete "PCT/EP03/08059" and insert -- PCT/EP03/03215--. A Certificate of Correction form PTO/SB/44 is enclosed along with a copy of the cover sheet with the correction marked thereon.

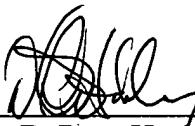
The following documents are also enclosed to support this correction:

A. Declaration and Power of Attorney for United States Patent Application - (note particularly page 2), which was filed at the USPTO on July 22, 2005 (note also postcard receipt marked A1), and

B. Cover page of WO 2004/011431 published 5 February 2004 (This is the publication document for PCT/EP03/08059 from which the referenced patent application was filed at the USPTO under 35 U.S.C. 371 and 37 C.F.R. 1.495.).

As this is a printing error on the part of the USPTO, no fee is required. Prompt issuance of a Certificate of Correction is earnestly solicited.

Respectfully submitted,

By: 

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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : 7,612,103

APPLICATION NO.: 10/521,926

ISSUE DATE : Nov. 3, 2009

INVENTOR(S) : Heinz Berner and Gabriele Kerber

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the cover sheet, first column at item (30) Foreign Application Priority Data, at the third item delete "PCT/EP03/08059" and insert -- PCT/EP03/03215 --.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

D. Peter Hochberg, Esq.  
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Cleveland, OH 44114

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*



US007612103B2

(12) **United States Patent**  
Berner et al.

(10) Patent No.: **US 7,612,103 B2**  
(45) Date of Patent: **Nov. 3, 2009**

(54) **PLEUROMUTILIN DERIVATIVES AS  
ANTIMICROBIALS**

(75) Inventors: Heinz Berner, Vienna (AT); Gabriele Kerber, Vienna (AT)

(73) Assignee: Nabriva Therapeutics AG, Vienna (AT)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 612 days.

(21) Appl. No.: **10/521,926**

(22) PCT Filed: **Jul. 23, 2003**

(86) PCT No.: **PCT/EP03/08059**

§ 371 (c)(1),  
(2), (4) Date: **Jul. 22, 2005**

(87) PCT Pub. No.: **WO2004/011431**

PCT Pub. Date: **Feb. 5, 2004**

(65) **Prior Publication Data**

US 2005/0250811 A1 Nov. 10, 2005

(30) **Foreign Application Priority Data**

Jul. 24, 2002 (GB) ..... 0217149.4  
Jul. 25, 2002 (GB) ..... 0217305.2  
Mar. 27, 2003 (WO) ..... PCT/EP03/08059

(51) **Int. Cl.**

*↓*  
A61K 35/31 (2006.01)  
A31K 35/27 (2006.01)  
C07D 211/80 (2006.01)

**Should read:**

(52) U.S. Cl. ..... 514/355; 514/423; 514/476;

546/285

(58) **Field of Classification Search** ..... 546/285;  
514/355, 423, 476

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

6,281,226 B1 8/2001 Sanderson et al.  
RE39,128 E \* 6/2006 Berry et al. ..... 514/305  
7,169,804 B2 \* 1/2007 Ascher et al. ..... 514/423

**FOREIGN PATENT DOCUMENTS**

WO	01/09095	2/2001
WO	02/12199	2/2002
WO	02/22580	3/2002

\* cited by examiner

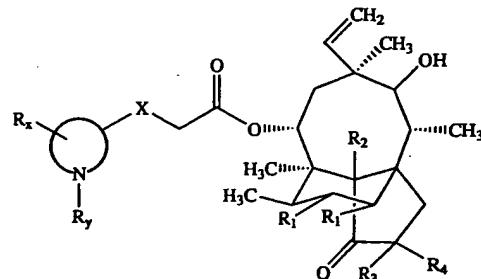
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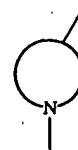
(57) **ABSTRACT**

Compounds of formula



wherein

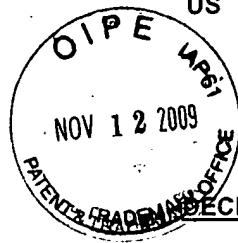
R<sub>1</sub> and R<sub>1</sub>' are hydrogen or deuterium,  
R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are hydrogen or deuterium,  
R<sub>5</sub> is the residue of an amino acid,  
X is S or N-ALK,



**PCT/EP03/03215**

is piperidinyl or tetrahydropyridinyl,  
ALK is (C<sub>1-4</sub>)alkyl, and  
R<sub>6</sub> is hydrogen, hydroxy or (C<sub>2-12</sub>)acyloxy,  
and their use as antimicrobials.

**8 Claims, No Drawings**



**DECLARATION AND POWER OF ATTORNEY FOR UNITED STATES PATENT APPLICATION**

Original

Supplemental

Substitute

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if more than one name is listed below) of the subject matter which is claimed and for which a United States patent is sought on the invention entitled

**PLEUROMUTILIN DERIVATIVES AS ANTIMICROBIALS**

the specification of which:

is attached hereto.

was filed on \_\_\_\_\_ as Application No. \_\_\_\_\_  
(day/month/year)

and, if this box (□) contains an x

was amended on \_\_\_\_\_  
(day/month/year)

(A)

was filed as Patent Cooperation Treaty international Application No.

PCT/EP03/08059 on 23/07/2003  
(day/month/year)

and, if this box (□) contains an x

entered the national stage in the United States and was accorded Application No.

and, if this box (□) contains an x

was amended, subsequent to entry into the national stage, on \_\_\_\_\_

(day/month/year)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) specifically referred to above and, if this application was filed as a Patent Cooperation Treaty international application, by any amendments made during the international stage (including any made under Patent Cooperation Treaty Rule 91, Article 19 and Article 34).

I acknowledge my duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or Patent Cooperation Treaty international filing date of the continuation-in-part application.

I hereby claim the benefit under 35 U.S.C. 119(a)-(d) or (f) or 365(b) of any foreign application(s) for patent, inventor's certificate or plant breeder's right certificate listed below and under 35 U.S.C. 365(a) of any Patent Cooperation Treaty international application(s) designating at least one country other than the United States listed below and have also listed below any foreign application(s) for patent, inventor's certificate or plant breeder's right certificate and Patent Cooperation Treaty international application(s) designating at least one country other than the United States for the same subject matter and having a filing date before that of the application the priority of which is claimed for that subject matter:

COUNTRY/REGION (OR P.C.T.)	APPLICATION No.	FILING DATE (day/month/year)	PRIORITY CLAIMED	
Great Britain	0217149.4	24/07/2002	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Great Britain	0217305.2	25/07/2002	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
PCT (EP)	PCT/EP03/03215	27/03/2003	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Great Britain	0207495.3	28/03/2002	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

APPLICATION NO.	FILING DATE (day/month/year)

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s) listed below and under 35 U.S.C. 365(c) of any Patent Cooperation Treaty international application(s) designating the United States listed below:

United States Application No.	United States Filing Date (day/month/year)	Status (Pending, Abandoned or U.S. Patent No.)	International Application No. and Filing Date (day/month/year)

I hereby appoint all of the registered practitioners associated with Customer No. 001095, respectively and individually, as my attorneys and agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

If this box (□) contains an x , I hereby authorize the registered practitioners associated with Customer No. 001095 and any others acting on my behalf to take any action relating to this application based on communications from Corporate Intellectual Property of Novartis International AG, Basle, Switzerland, or an affiliate thereof or a successor thereto, without direct communication from me.

Please send all correspondence relating to this application to the address associated with Customer No. 001095.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full name of sole  
or first joint inventor

**Heinz BERNER**

Inventor's signature



Date

10.1.2005

(day/month/year)

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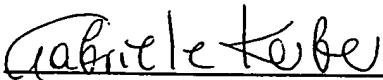
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Full name of second  
joint inventor, if any

**Gabriele KERBER**

Inventor's signature



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**IMPORTANT:** Before this declaration is signed, the patent application (the specification, the claims and this declaration) must be read and understood by each person signing it, and no changes may be made in the application after this declaration has been signed.

Case No. 1816-32577A

Application No. 10/521,926

Mailing Date: July 22, 2005

Due Date: JC04 Rec'd PCT/PTO 22 JUL 2005

Express Mail No. EV724615626US

The Patent & Trademark Office acknowledges, and has stamped hereon the date of receipt of the items checked below:

- Amendment/Response/Letter - Fee \$ \_\_\_\_\_
- Appln. Filing Papers - Fee \$ \_\_\_\_\_
- PCT National Stage \_\_\_\_\_
- Provisional Application \_\_\_\_\_
- RCE  DIV  CONT  CIP \_\_\_\_\_
- Specification \_\_\_\_\_ Pg's \_\_\_\_\_
- Executed ~~Unexecuted~~ Decl. - Fee \$ 130.00
- Missing Parts/Missing Req. \_\_\_\_\_
- Preliminary Amendment \_\_\_\_\_ Pg's \_\_\_\_\_
- Claim of Priority  Certified Copy(s) \_\_\_\_\_
- Amendment After Final \_\_\_\_\_
- Notice of Appeal - Fee \$ \_\_\_\_\_
- Appeal Brief - Fee \$ \_\_\_\_\_
- Issue Fee Payment \$ \_\_\_\_\_
- Assignment Rec. Req. - Fee \$ \_\_\_\_\_
- Formal Drawings \_\_\_\_\_ Pg's \_\_\_\_\_
- IDS \_\_\_\_\_ Pg's - Fee \$ \_\_\_\_\_
- PTO-1449 Form \_\_\_\_\_ Pg's \_\_\_\_\_
- Pet. for Ext. of Time - Fee \$ \_\_\_\_\_
- Application Data Sheet \_\_\_\_\_
- Seq. Listings \_\_\_\_\_ Pg's/Seq. Disk \_\_\_\_\_
- \_\_\_\_\_

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Initials

82972/99A Rev.1



